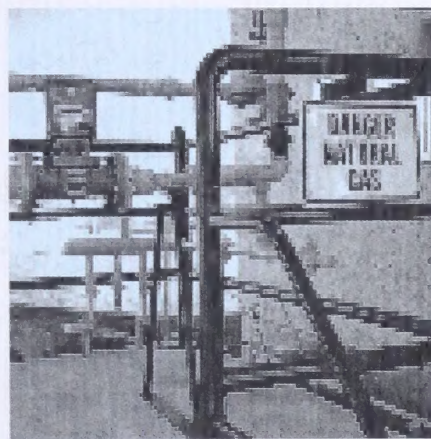


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**ALBERTA  
TRANSPORTATION  
AND UTILITIES  
ANNUAL REPORT  
1989/1990**



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# 1989/90 ANNUAL REPORT

**Alberta**  
TRANSPORTATION  
AND UTILITIES

ISSN 0836-1509





TRANSPORTATION  
AND UTILITIES

Office of the Minister  
208 Legislature Building  
Edmonton, Alberta  
T5K 2B6

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403/427-2080

The Honourable  
Gordon Towers  
Lieutenant-Governor  
Province of Alberta

Sir:

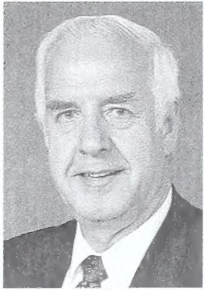
I have the honour to submit to you the Annual Report of Alberta Transportation and Utilities for the fiscal year ending March 31, 1990.

A handwritten signature in blue ink that reads "Allen 'Boomer' Adair". The signature is written in a cursive, flowing style.

Allen "Boomer" Adair  
Minister of Transportation  
and Utilities



## MINISTER'S MESSAGE



**O**ur mission is to provide the people of Alberta with an efficient, integrated transportation system and access to utility services, which support Alberta's social and economic well-being.

In fulfilling that mission we placed a high priority on our commitment to safety and to working with our municipal partners throughout Alberta.

Safety in the movement of people and goods is a key goal of Alberta Transportation and Utilities. In 1989 safety was improved in a number of areas. For example we opened a Compliance Information Service to better serve motor transport carriers. This service assists people in how to build, load and operate trucks, to conform to legal weight, dimension and safety requirements under the National Safety Code.

The new National Safety Code for commercial trucks and buses came into force in 1988. Alberta together with Ontario and Quebec, lead the way in being the first provinces to adopt and implement all the National Safety Code modules.

In another area, an innovative safety education program, the "Mobile Safety City" was developed. The Mobile Safety City provides youngsters with an opportunity to safely walk through the streets of a miniature city and to practice crossing at intersections. This program reaches the pedestrians and motorists of tomorrow.

We are committed to working with municipalities. Over the last year the department consulted with municipalities, industry, representative associations, as well as interested and affected individuals to ensure a clear understanding of all clients' concerns. Through this dialogue with local authorities the priorities of programs, such as the Secondary Highways Program, were developed, continuing the department's close working relationship with municipal councils.

To help local road authorities make better use of their resources, the department worked closely with these authorities to train their personnel. Educational programs carried out by the department, such as the Bridge Inspector Program, will help local road authorities to extend the life of their bridges and protect the public's investment in these vital structures.

During the 1989/90 fiscal year \$618 million was expended on the construction and maintenance of provincial roadways.

New programs designed to assist cities, towns, villages and summer villages were commenced in 1989. The Alberta Cities Transportation Partnership is a \$500 million program designed to help Alberta cities with the development of safe and efficient transportation systems. The Streets Improvement Program is designed to provide financial assistance to Alberta towns, villages and summer villages for the construction of transportation projects. Both of these programs provide an enhanced level of funding and included a new initiative, the Community Safe Streets Program. The Community Safe Streets Program assists in the development of safety-related transportation facilities such as pedestrian crossing signals, pedestrian overpasses, LRT security devices, emergency roadside telephones and improved lighting. High quality transportation systems and services were provided through these new programs.

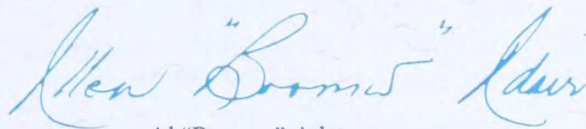


One of the fundamental goals of the provincial government is to equalize opportunities for all citizens. Many of our utilities programs have exactly this aim: to equalize access to, and cost of, utility services across Alberta. In the past year the department has provided grants for water, electrification, heating and gas.

In 1989 a history book on the Rural Gas Program entitled *Harvesting the Flame* was released. This book commemorated the development of this immensely successful program which has seen the provision of natural gas to almost all parts of rural Alberta. The Alberta rural gas system, which is primarily owned and operated by local gas co-operatives, is unique and unequalled anywhere in the world.

Our role in representing Alberta's transportation and utility interests does not end at our own borders however. We are constantly working in co-operation with other Canadian jurisdictions in matters of mutual interest. Last year, as part of the National Highway Policy Committee, we worked with other provinces to address highway needs at the national level. We also initiated work on a submission for the Royal Commission on National Passenger Transportation Systems.

It is a pleasure to direct a department which plays a key role in the everyday lives of all Albertans.



Al "Boomer" Adair  
MINISTER



## DEPUTY MINISTER'S MESSAGE



Over the past year, our department has achieved its mission and provided Albertans with an efficient, integrated transportation system and access to utilities.

What is significant is that we have not only achieved our mission but improved Alberta's transportation and utilities in a time of continued fiscal restraint, and with a reduced staff.

The demands on our department's services have been met through greater departmental efficiency. A number of initiatives have contributed to this efficiency. One such initiative was a move towards a more decentralized delivery of transportation services.

Use of private contractors provides efficiencies and flexibility. Our construction contracts tendered in 1989/90 averaged very close to one tendered for every working day of the year. That is a pace which a few years ago we would have considered almost impossible. But even more important than the volume handled last year, the quality of the contracts was better than ever with regard to specifications, completeness of special provisions, and quality.

Our commitment to forward planning and consultation increases the efficiency of our operations. Last year, in anticipation of strengthened environmental legislation, the department initiated a review of its construction, maintenance and other operating procedures with the objective of enhancing environmental protection. This year Alberta Environment announced it is developing new environmental protection and enhancement legislation. We are now better prepared to work with Alberta Environment because of the proactive stance we have taken.

Another way in which we have increased efficiency is the application of new technologies. A departmental Technology Transfer Program was developed last year and a quarterly publication "Transearch" was launched.

These initiatives have enabled us to do more with less – without compromising on safety, service, or overall effectiveness.

Our highly motivated staff is a critical resource. As part of a commitment to further develop our human resources, the department has developed a number of proposals for new ways and means of enhancing the quality of our employees' careers with Alberta Transportation and Utilities. Proposals which have been implemented include: an In-House Management Training Certificate Program, and the establishment of a committee to support the Alberta's Plan for Action for Women.

The accomplishments of our department reflect skills and commitment of a strong team of individuals operating out of offices across the province. I am proud and privileged to be part of this strong and vibrant department.

A stylized, cursive signature in blue ink that reads "H. Alton".

Harvey M. Alton  
DEPUTY MINISTER



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# PROVINCIAL TRANSPORTATION

## CONSTRUCTION AND MAINTENANCE: ACCOMPLISHMENTS AND INITIATIVES

### Construction

**C**onstruction was delayed somewhat this spring due to wet weather, however, favourable weather the rest of the year made up for the early delays resulting in an overall good year for construction. Construction was undertaken on approximately 2976 kilometres of primary and secondary highways, resource roads, park roads and approach roads. Final quantities for 1989 included approximately 39 million cubic metres of earth moved, a record 8.3 million tonnes of granular base course placed, 816 thousand tonnes of cement stabilized base course laid, and 3.9 million tonnes of asphaltic concrete mixed and placed.

To meet the department's objective to provide safe and efficient transportation systems continuing emphasis was placed on the following major incentives.

▣ **HIGHWAYS 1 AND 16 FOUR-LANING PROGRAM:** The Highways 1 and 16 twinning program progressed well, despite extensive wet periods this year. Construction was still on schedule for completion of the four-laning program in late 1991. Construction was underway on 23 major projects in 1990.

▣ **HIGHWAY 63 WIDENING PROGRAM:** Good progress was achieved in 1989 on widening Highway 63 to Fort McMurray, with three major construction projects underway. Highway 63 widening will accommodate the heavy loads and increased traffic expected with the development of the heavy oil sands projects at Fort McMurray. This is the only road access to the City of Fort McMurray.

▣ **HIGHWAY 2 MEDIAN WIDENING PROGRAM:** Work continued on Highway 2 between Airdrie and Red Deer to increase safety and improve operation.

▣ **EXPORT HIGHWAY PROGRAM:** Construction was underway on two four-laning projects on Highway 2. This program will eventually provide a four-lane highway linking the United States with Calgary and Edmonton.



#### ┘ SECONDARY HIGHWAYS 2000 PROGRAM:

This program was announced by the Premier in the spring of 1989. The objective of the program is to complete the surfacing of the secondary highway system by the year 2000. At the time of announcement, 6255 kilometres or approximately 42 per cent of the system had been surfaced. This year 630 kilometres of the system was base coursed and 172 kilometres final paved. At the end of the year 47 per cent of the system was surfaced.

┘ PEACE RIVER PULP MILL INFRASTRUCTURE: Construction continued on the transportation infrastructure for the new Peace River Pulp Mill. Total estimate for new construction and upgrades of existing facilities is approximately \$75 million.

New privatization initiatives in the areas of cracksealing, rest area maintenance and pavement message painting were implemented. Activities already privatized, including mowing of highway rights-of-way and the application of dust control, were monitored for performance.

Skid resistance surfacing was applied to 944 lane-kilometres of primary highways, 254 lane-kilometres of secondary highways and eight lane-kilometres of local roads by the department's two camps. The department contracted 198 lane-kilometres of skid resistance surface treatment to the private sector of which 134 lane-kilometres were completed.

The department continued its program of protecting the environment with a total of 153 erosion control projects completed. This represented 7899 hectares (19 748 acres) of rights-of-way, earth borrow areas, and reclaimed gravel pits. Under the Highway Cleanup Campaign, a total of 9228 kilometres were cleaned with 65 784 bags of litter being collected by 10 458 children and 4501 adults, representing 626 clubs.

During the year, Aviation held meetings with local officials in many communities to provide information on the Alberta Airport Development Program and give advice and assistance regarding operations. Liaison was continued with aviation related industries and organizations such as the Alberta Aviation Council.

Background information, technical advice and position papers for senior management were provided on a wide variety of aviation subjects as part of departmental initiatives or in response to federal activities in both the operational and policy areas of air transportation.

As part of the continuing pavement rehabilitation initiative to preserve the investment in existing airports, runway overlays were completed at Lac La Biche and Valleyview. In addition the air tanker loading area was enlarged at the Slave Lake Airport. Official opening ceremonies were held for the airport terminal building at High Level.

To meet the long and short term transportation needs of rural municipalities and urban communities, regional and district staff met regularly with elected officials to review and resolve local transportation and utility issues.

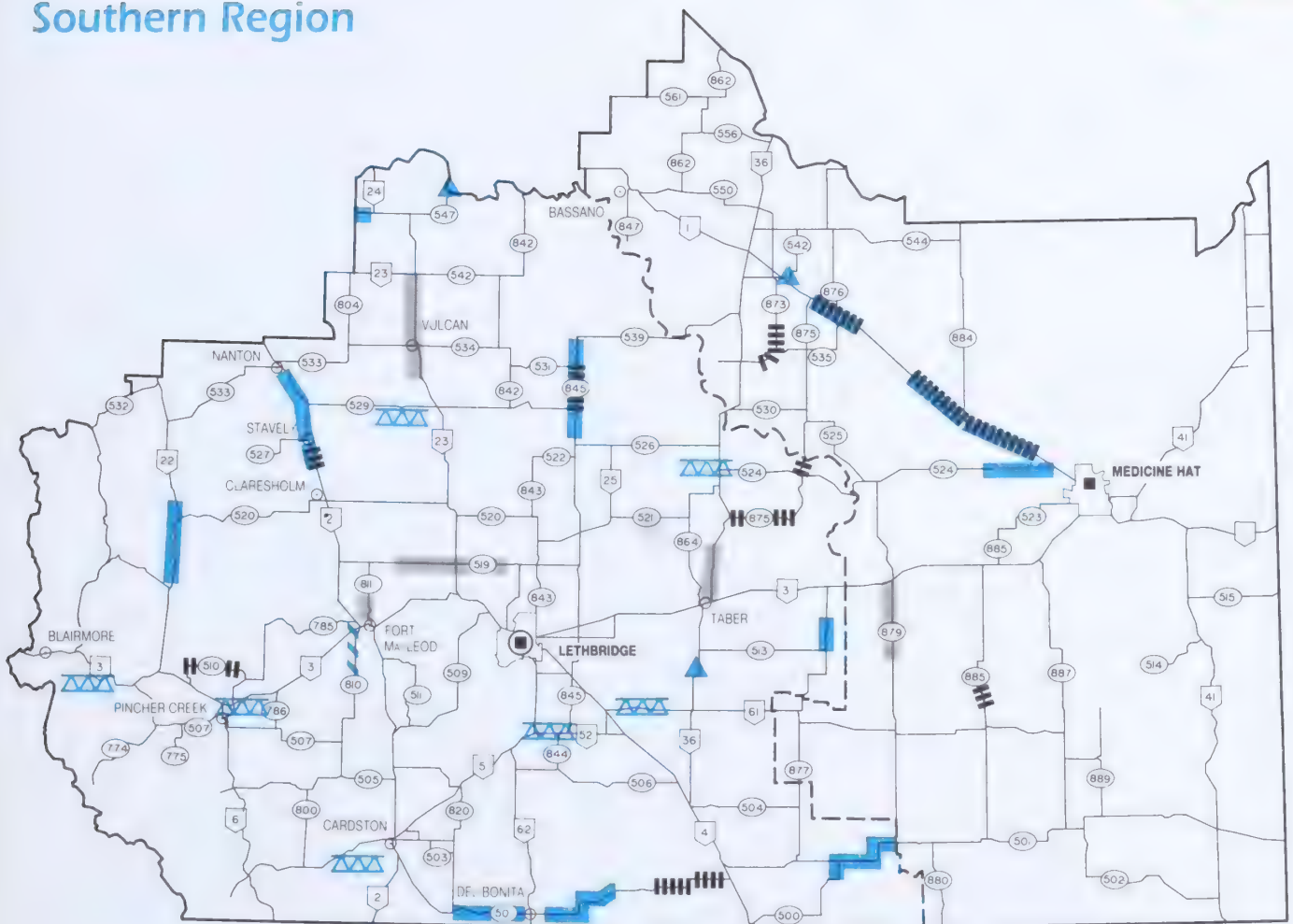
#### **Maintenance**

Maintenance operations were undertaken on approximately 37 530 kilometres of Primary Highways and Improvement District roads. Other maintenance responsibilities included 16 provincial airports, 62 airstrips, the Civilian Air Terminal at Medley, seven ferries and 103 campgrounds and rest areas.





# Southern Region



## CONSTRUCTION

Department staff administered 28 contract projects in 1989. In total, 173 kilometres of base course, 187 kilometres of asphalt paving and 70 kilometres of grading were completed. In addition, one crushing and two major pit run stockpiling projects associated with the construction of the Oldman River Dam were completed. Funding was provided to the local counties and municipal districts for 10 construction contracts and day labour grading projects involving 44 kilometres of the secondary highway system as well as for 62 kilometres of dust abatement. This work was handled by the counties and municipal districts with the assistance of their engineering consultants.

A 21 kilometre final paving project was completed on the Export Highway from north of Stavely to Nanton. Grading commenced on the 17 kilometre section from Claresholm to north of Stavely with construction scheduled to be completed in 1990.

Major bridge structures completed in 1989 included the Pincher Creek Structure on a local road east of the Town of Pincher Creek, the Little Bow River crossing east of Stavely, and the Etzikom Coulee bridge on Highway 61 east of Sterling.

## LEGEND

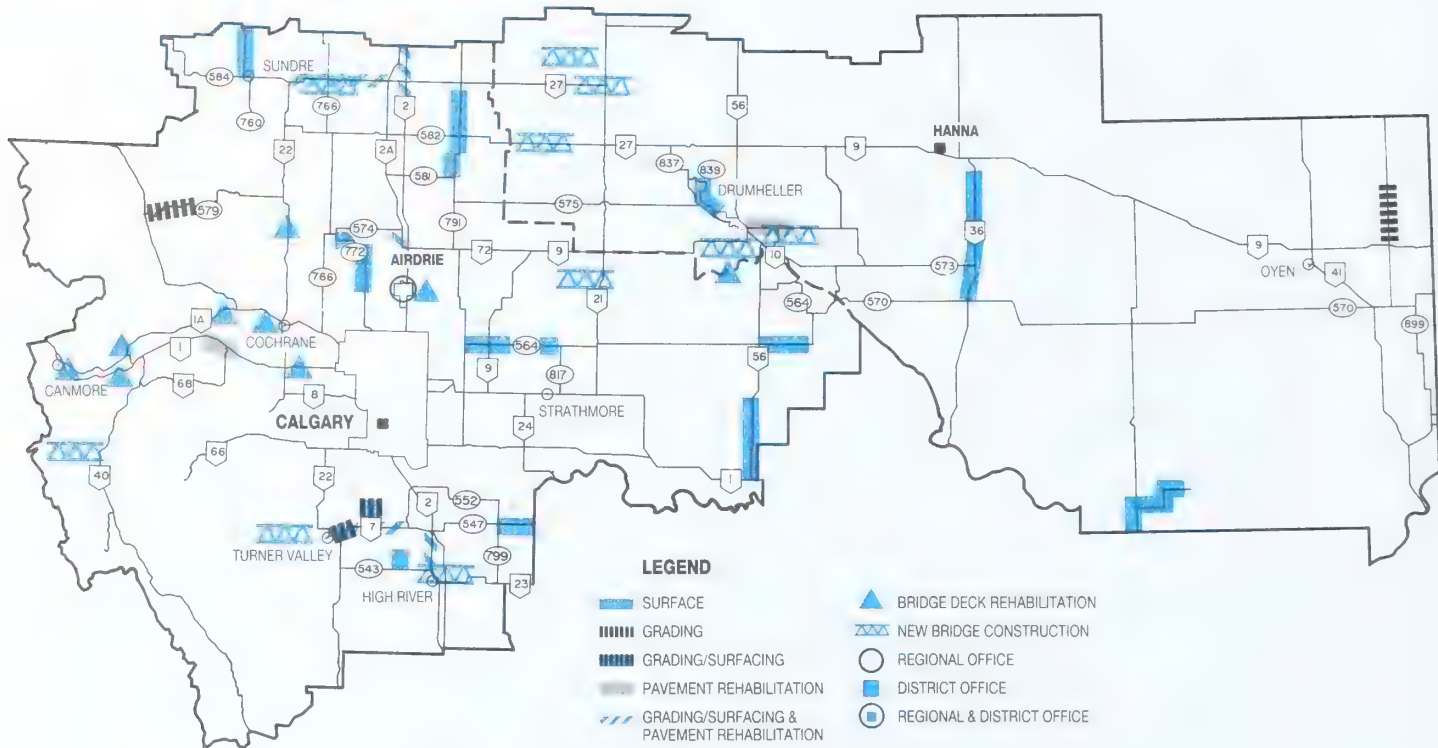
SURFACE	BRIDGE DECK REHABILITATION
GRADING	NEW BRIDGE CONSTRUCTION
GRADING/SURFACING	REGIONAL OFFICE
PAVEMENT REHABILITATION	DISTRICT OFFICE
GRADING/SURFACING & PAVEMENT REHABILITATION	REGIONAL & DISTRICT OFFICE

## MAINTENANCE

Normal weather conditions during the summer months permitted regular summer maintenance operations. However, severe winter conditions in the western half of the region resulted in a record quantity of sand and salt being used to ensure safety for the travelling public.

Under the bridge maintenance program the Oldman River truss bridge at Fort MacLeod and the Milk River truss bridge east of Cardston were painted. New deck joints were installed on the 25 span bridge across Chin Reservoir on Highway 36 south of Taber.

## South Central Region



### CONSTRUCTION

In total, 128 kilometres of grading, 85 kilometres of asphaltic stabilized base course, 57 kilometres of granular base course and double seal coat, 61 kilometres of granular base course and pavement, and 104 kilometres of asphaltic concrete pavement were completed in 1989. Thirty-one contract projects were managed by the region and 19 contract projects were managed by the counties and municipal districts with the assistance of their consulting engineering firms.

A 10 kilometre median widening project was completed on Highway 2 from north of the Olds Interchange to Bowden. This project was part of the Highway 2 Median Widening Program.

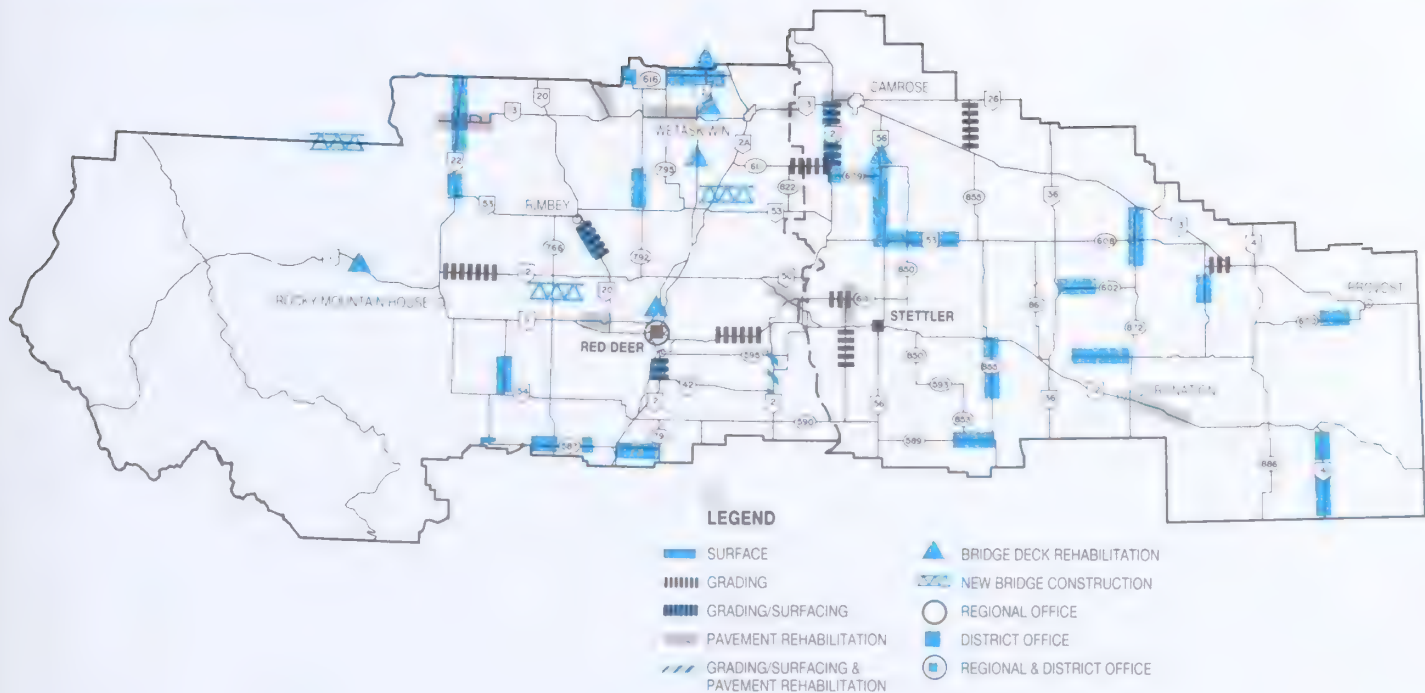
Two bridges on Highway 10X were strengthened to allow heavier loads on this highway and a major bridge was constructed on the local road over Kneehills Creek near Torrington.

### MAINTENANCE

In addition to normal maintenance activities, extensive patching of older highways was undertaken to extend the time for rehabilitation or reconstruction to be necessary. In co-operation with the Integrated Resource Management Group of Alberta Forestry, Lands and Wildlife and Ducks Unlimited, the mowing of grass in the highway rights-of-way in the Hanna District was reduced to only five metres from the pavement edge to provide natural habitat for rodents and birds.



## Central Region



### CONSTRUCTION

With the completion of projects on Highway 41 and 22, these highways are now surfaced throughout the region. Pavement overlay and sideslope improvement was carried out on sections of Highways 13, 11A, 20, 53 and SH 835 resulting in a cost effective extension of the life of these highways. Total construction included 357 kilometres of asphaltic concrete pavement, (which includes 133 kilometres of pavement rehabilitation), 235 kilometres of base course and 185 kilometres of grading, 23 smaller bridge and culvert structures, a major bridge structure on the Medicine River south of Benalto and a pedestrian bridge in Ponoka.

A major reconstruction project was completed on Highway 21 from south of New Norway to Junction Highway 13 and an approximate nine kilometre median widening project on Highway 2 from south of the Penhold Interchange to south of Red Deer was started in 1989 with completion scheduled for 1990.

### MAINTENANCE

Through Christmas the Stettler District experienced severe icing at low temperature and there was little improvement in icy conditions for almost a week until warmer weather and application of three times as much salt as is normally used finally returned the highways to bare condition.

Guardrail standards were examined. The replacement of guardrail with cable on Highway 53 on the Battle River Hills reduced an ongoing accident problem related to drifting snow accumulating and making the driving lanes slippery.

Plans to move the guardrail closer to the obstacle on Highway 2 were also developed to provide better protection for motorists and reduce snow drifting on the driving lanes.

Pavement patching costs were reduced through major patching being undertaken using hot-mix material from nearby paving projects.

The 1989/90 fiscal year saw hold-the-line maintenance costs with savings that offset inflationary trends while maintaining a satisfactory level of service.

# North East Region

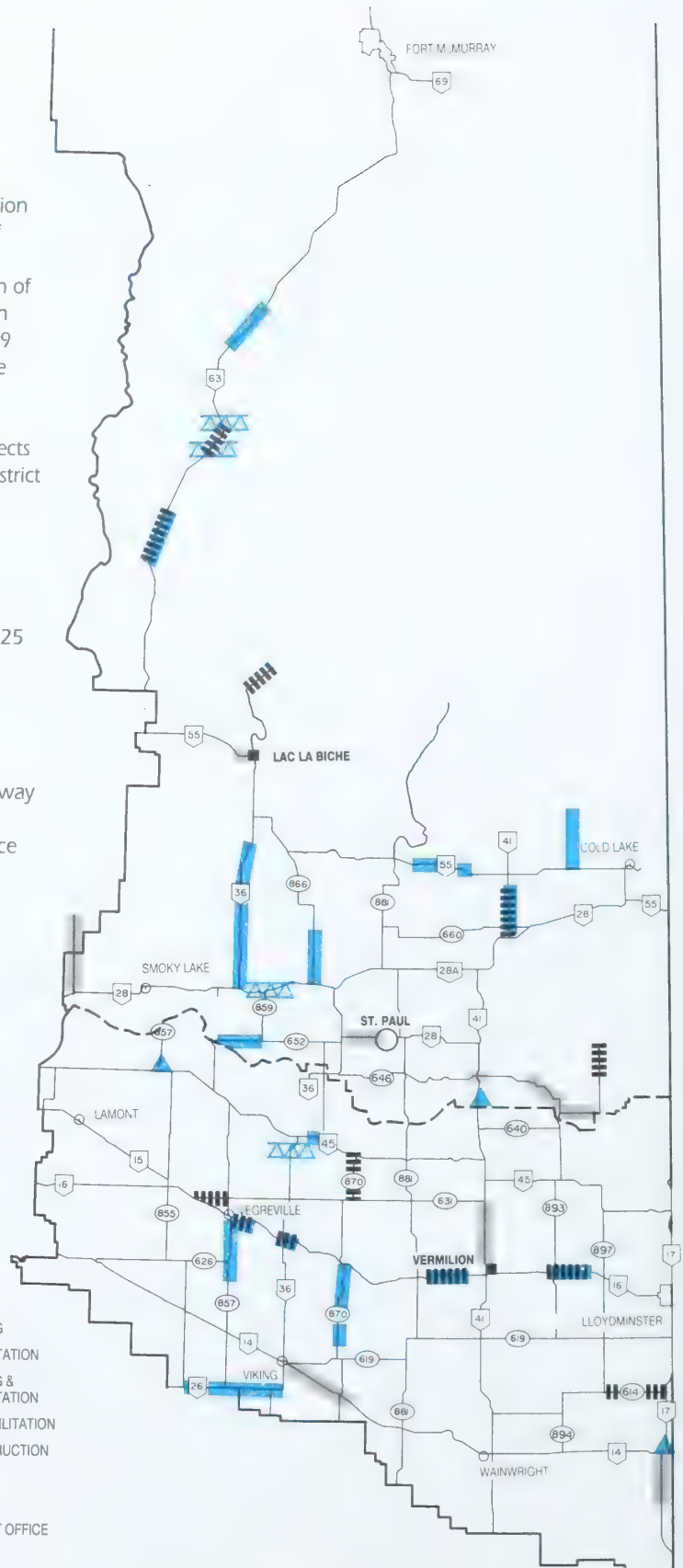
## CONSTRUCTION

Upgrading of the Yellowhead Trans-Canada Highway continued on schedule with completion of the section from east of Vegreville to east of Highway 36. The widening of Highway 63 continued from east of the May Tower to north of Marianna Lake. Total construction in the region consisted of eight grading projects involving 89 kilometres, five combined grading, base course and paving projects totalling 61 kilometres, 11 base course projects involving 122 kilometres, three combined grading and base course projects for a total of 40 kilometres. In Improvement District No.18, 118 kilometres of roadway were constructed and 1146 kilometres were gravel surfaced.

Construction of bridges on primary and secondary highways, local roads and resource roads included four standard size bridges and 25 bridge size culverts.

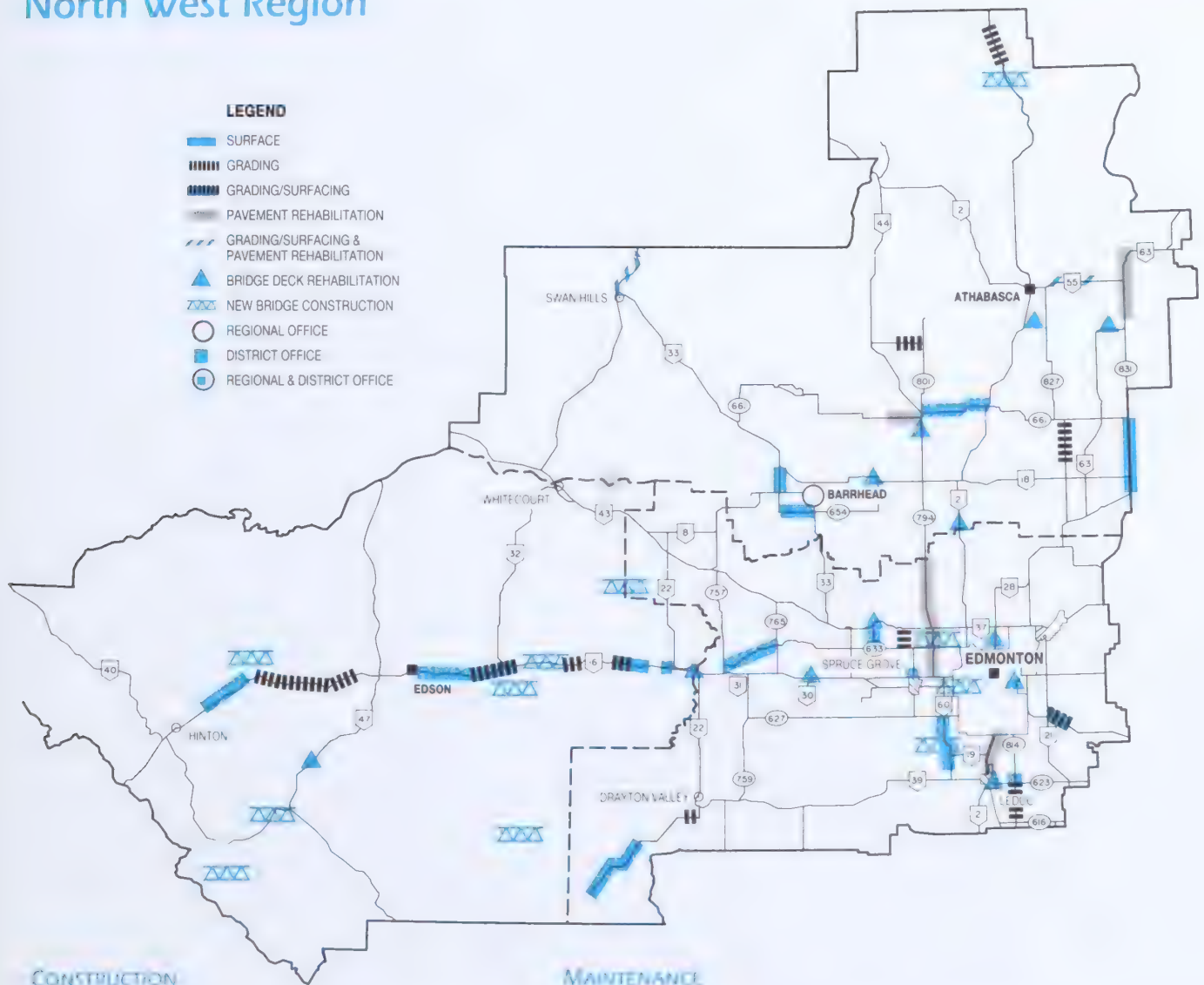
## MAINTENANCE

The region experienced no extraordinary highway or road maintenance requirements during the year. Two primary highway bridge maintenance projects were undertaken as well as 31 on secondary highways and local roads.





# North West Region



## CONSTRUCTION

The major undertaking continues to be the improvement of safety standards on major highways. Twinning of the Yellowhead Trans-Canada Highway continued with 10 grading projects, four base course projects and one paving project in progress between Hinton and Evansburg.

The region completed 149 kilometres of grading, 141 kilometres of base course, and 207 kilometres of paving as well as combination projects consisting of five kilometres of grading and base course, 16 kilometres of base course and paving and 10 kilometres of grading, base course and paving. Additionally, 54 kilometres of grading and 810 kilometres of gravelling was completed on the local road system in the Improvement Districts.

## MAINTENANCE

The area experienced a record amount of rainfall during the summer and fall requiring a higher level of road repair than usual.

# Peace Region

## CONSTRUCTION

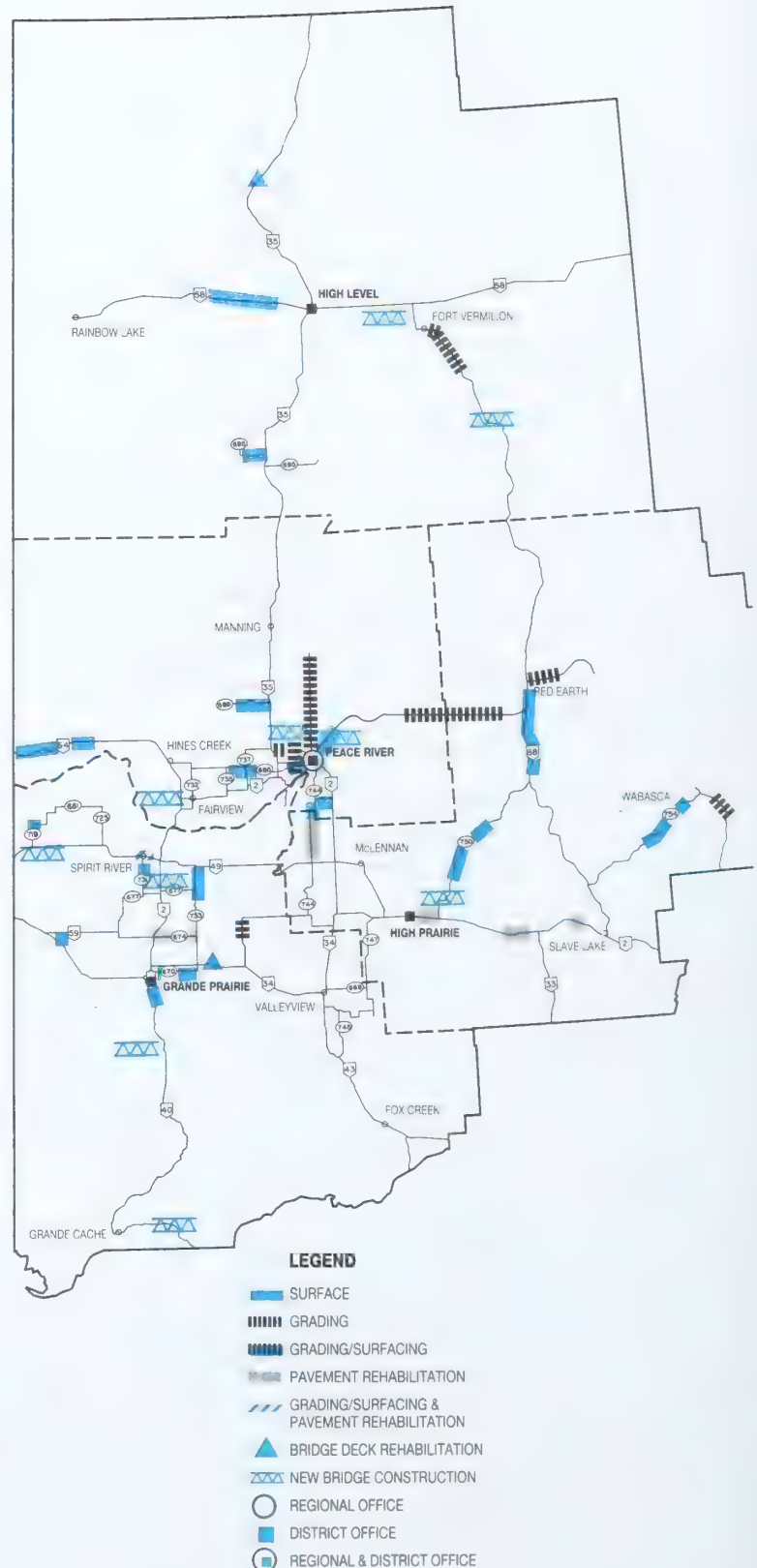
In keeping with government policy to privatize in areas where economics and practicality would prevail, for the first time in 1989/90 a catering service was employed for a large bridge construction camp, several concrete overlays on bridges and two wood strip deck replacement projects.

Construction of a major bridge structure occurred at SH 686 over the rail line at the Peace River Pulp Mill. Substructures were constructed for new bridges near Rocky Lane, at the Highland Park crossing on SH 682 and at the Grouard narrows on SH 750. Three piers were constructed on the major bridge crossing the Peace River on SH 686. Additionally 10 standard bridges were constructed and 30 bridge size culverts were installed on local roads and highways in the region.

Construction of primary highways and secondary highways involved 163 kilometres of grading, 244 kilometres of base course and 221 kilometres of paving. One combination grading and base course project was completed for 10 kilometres, two small base course and paving combination projects were completed for approximately five kilometres and four grading, base course and paving combination projects were completed for 41 kilometres. Total local road construction in the Improvement Districts and Indian Reserves was 256 kilometres of grading, 4096 kilometres of gravelling, 57 kilometres of dust abatement, and nine kilometres of asphalt surfacing.

## MAINTENANCE

The extremely wet summer experienced in the more developed parts of the region resulted in many road wash outs, requiring timely road repairs and extra gravelling. The winter conditions were adverse with several freeze-thaw cycles, regular periods of rainfall, and in the High Level district, extra heavy snow fall.





## POLICY AND PLANNING

### National and Provincial Policy

National policies are critical to the transportation infrastructure and services available to Albertans. The department takes an active role in representing Alberta's needs and interests in national forums.

During the year, Policy Development staff continued to participate with representatives of the federal government, other provinces and the territories in the national highway policy committee. A system of national highways was defined, the costs and benefits of upgrading this system to common standards were identified, and national highway programs in other countries were assessed.

Preparation was also well underway by year end on a preliminary and final submission to the Royal Commission on a National Transportation System. Established by the Prime Minister in the fall of 1989, the Royal Commission has broad terms of reference to provide Canadians with a blueprint for a co-ordinated multi-modal passenger system. Alberta welcomed the opportunity to review and make recommendations for the policy framework that will guide the evolution of Canada's transportation system into the twenty-first century.

A review of the Alberta Railway Act was also initiated in 1989/90. The aim is to update this old legislation and provide a solid base for the future establishment and operation of private railway companies in Alberta. The experience of the federal government, other provinces and U.S. states was assessed as input to the review process.

At year end, policy related responsibilities and certain staff of the Transportation Services Branch of Alberta Economic Development and Trade were transferred to the department. The transfer included the Regional Airports Authorities legislation and railway relocation program. With the merger of policy staff of the two departments, Alberta will be in a better position to address transportation issues from a multi-modal perspective and to streamline its interface with industry and other governments.

### Planning for the Future

The analysis of future travel patterns and transportation requirements is the first step in planning and developing Alberta's highway network. In 1989/90 work commenced on a long range systems plan which will provide a twenty-year model of highway sufficiency. This initiative is a team effort led by Systems Planning with expertise from a number of areas in the department.

In addition to province-wide planning, the department assisted municipal authorities with local and regional transportation plans, and worked with industry and other departments on the transportation requirements associated with major economic developments and other initiatives. Examples of the latter include the proposed OSLO oil sands project and a scenic touring route in the area of the Red Deer River Valley.

## ENGINEERING AND RIGHT-OF-WAY

### Planning Provincial Highway Development

An intensified review was made of the primary and secondary highway systems, to identify potential future operational problems which could be avoided through pro-active attention. Field investigations and operational reviews carried out in this regard totalled over 400 studies.

With the province's return to general economic stability, there was a substantial increase in private development proposals involving transportation issues. Improved liaison with municipalities and private sector developers ensured that the planning of transportation infrastructure for these projects will serve both public and development long-term needs. For a number of these proposals associated with tourism, forestry and other resource-related development, special road location and planning studies were completed.

Increased emphasis was placed on effective communication to encourage full input from the general public, local authorities and other government departments and agencies, to fully address social, environmental and engineering concerns in the process of planning highway extensions and improvements.

An environment impact assessment, involving full public participation, was commissioned for a proposed highway interchange on Highway 16X located close to the Wagner Natural Area west of Edmonton. Study conclusions, forthcoming in the ensuing year, are expected to provide guidance for the detailed physical planning of this interchange, ensuring the integrity of the Natural Area is fully accommodated.

### **Right-of-Way Acquisition**

Staff developed and monitored policies and procedures relating to the acquisition, sale and management of real property in the regions. Approximately \$7 million was expended on purchase of right-of-way involving dealings with 900 different landowners. Mutual purchase agreements were reached in over 98 per cent of these transactions. Use of the full expropriation process was therefore minimal being required in only 11 cases.

In keeping with the department's objective for maximizing use of private sector services, 60 per cent of legal surveys and all independent property appraisals were carried out by private companies.

### **Engineering for Quality Transportation Systems**

In the geometric design of roadway projects, the use of computer based systems allowed major progress to occur in the continuing decentralization of this function to regional staff. All district offices now have the required computer installations and during the reporting period, about 65 per cent of roadway grading project designs done by the department were accomplished regionally. Headquarters' Design Engineering, which saw significant downsizing through the decentralization process, assumed a standards development, training and consultative role to the regions. During the year the branch conducted computerized design training programs for 150 district staff. Decentralized earthwork design using modern computer techniques now provides at the district level the ideal combination of technical capability and the designer's familiarity with the worksite, for provision of effective and economical designs tailored to specific local conditions.

In bridge design, Bridge Engineering continued significant use of private sector engineering consultants, who provided designs for four large bridges constituting design requirements for about 70 per cent of the estimated capital value of new bridges designed in the reporting period.

The use of more sophisticated aggregate engineering in asphalt mix design for surfacing projects undertaken during the year is expected to reduce future pavement rutting problems significantly. An experimental hot-in-place pavement recycling project was constructed to evaluate this potentially cost-effective means of pavement rehabilitation. Further refinement and use of End Product-type specifications on paving projects, incorporating penalty/bonus provisions for quality of product, resulted in an increase in the overall pavement quality index for the province's primary highway system.

Experimental use of culvert liners and new types of fencing materials were tried this year and will be evaluated. Automated electronic data gathering was increased, particularly in the areas of construction survey technology, pavement evaluation and geotechnical monitoring.



Surveyor using electronic fieldbook.



Materials Engineering, working with the regions, developed refined design and construction techniques employing a sealed base concept for hard surfacing of low volume roads, enabling more miles of secondary highways to be surfaced with available budgets. Regional staff transferred this technology and guidance to the local municipalities for implementation.

### **Protecting the Province's Investment in Roads and Bridges**

The province's enormous investment in quality road and bridge infrastructure represents an asset that must not be allowed to deteriorate.

Condition monitoring systems, such as the Pavement Management System and the Bridge Inspection System, continued to serve as major tools for analysis and programming of essential rehabilitation projects based on the most cost-effective timing. Despite cutbacks in available capital funding over recent years, the level of expenditure on pavement rehabilitation was maintained at close to \$41 million. Bridges also received extended life with \$6 million spent on the continuation of the deck rehabilitation program. State-of-the-art techniques employed in deck waterproofing systems are expected to substantially extend the life of many existing bridges.

The department's bridge inspection and maintenance program was expanded to provide inspection training to 75 municipal and county staff, thus enabling the local municipalities to directly carry out these functions on standard bridges and culverts for the road systems under their jurisdiction.

To accommodate modern 62.5 tonne maximum vehicle loadings, the program of strengthening older bridges continued on both primary and secondary highway systems. At year end only 15 bridges in the primary highway system and 136 in the secondary system required posting below this loading capacity.

### **Contracting of Construction**

The department continued close liaison with the construction industry to ensure an equitable process in the development of new specifications and contract conditions. The longstanding policy of competitive tendering of major road construction continued to be expanded to include those small, local road projects in Improvement Districts, formerly carried out using hired equipment. Twenty new contracts of this type were called during the year. This is an expansion over 12 such projects in the previous year. Use of End Product Specifications met wide acceptance with the road paving industry, this type of contract being utilized on 11 projects tendered during the year. In all a total of 219 road-related contracts and 38 bridge contracts were publicly tendered through the department's central tendering system.



The trend to placing the engineering and contracting responsibility for the Secondary Highway Program to local, municipal jurisdictions continued, with some 34 local municipalities directly consulting out engineering work on 82 secondary highway projects of various types. A total of 44 secondary highway construction contracts were tendered directly by the counties and municipal districts.

A major study was undertaken to determine the costs and benefits of the gravel truck hiring and payment policy embodied in departmental construction contracts. Results of this study, commissioned to a large, independent consulting firm, were provided to the gravel trucking industry and government for policy review purposes.

**"V" Lock Fence,  
Red Deer Area – an  
experimental type  
of right-of-way fence.**

## FLEET AND MATERIALS RESOURCES

The department's ability to provide a high level of service in the day-to-day upkeep and operation of the provincial transportation systems depends highly upon its fleet of maintenance equipment, ready and reliable for use in often severe climatic conditions. The new Equipment Management System assisted Equipment, Supply and Services in improving and extending preventative maintenance programs to more classes of equipment, in providing shop work effectiveness standards, and in co-ordinating fleet repair services from the private sector.

A new design of tandem axle snowplow trucks, providing higher levels of productivity, reliability and fuel economy, was developed and tested, and will now be standardized.

Apprenticeship mechanic training opportunities were significantly increased at area and satellite repair shops decentralized throughout the province.

## RESEARCH AND DEVELOPMENT

Alberta Transportation and Utilities has a strong commitment to implementing technical solutions which enhance the efficiency and effectiveness of its construction, maintenance and other operations. A number of factors characterize the department's research program managed by Research and Development. Firstly, priorities are guided by five-year and annual plans, developed with input from a Research Advisory Committee with representation across the department. Opportunities for co-operative projects with other jurisdictions and agencies are actively sought to encourage technology transfer and elicit support for the department's research investment. Finally, information sharing and technology transfer across the department's decentralized regional and district organization are high priorities.

In 1989/90, the department continued its active participation in the Canadian and U.S. Strategic Highway Research Programs which are investigating asphalts, pavements, concrete structures and highway maintenance operations. For a modest investment, access is gained to the results and technologies from this \$150 million international co-operative research effort.

Applied research with environmental objectives was also a highlight of the 1989/90 program. Projects included erosion control, recycling of various wastes and products, wildlife control and use of non-corrosive de-icing chemicals. The adaptation of new technologies remained another priority with a number of projects underway or completed during the year. Expert computer systems to improve bridge maintenance and road design were successfully implemented. Technologies to collect and store geographic information continued to be explored, such as laser disc technologies for computerized map storage and retrieval. With the objective of improving service to the trucking industry, weigh-in-motion and automated vehicle identification systems were also the subject of ongoing research projects.



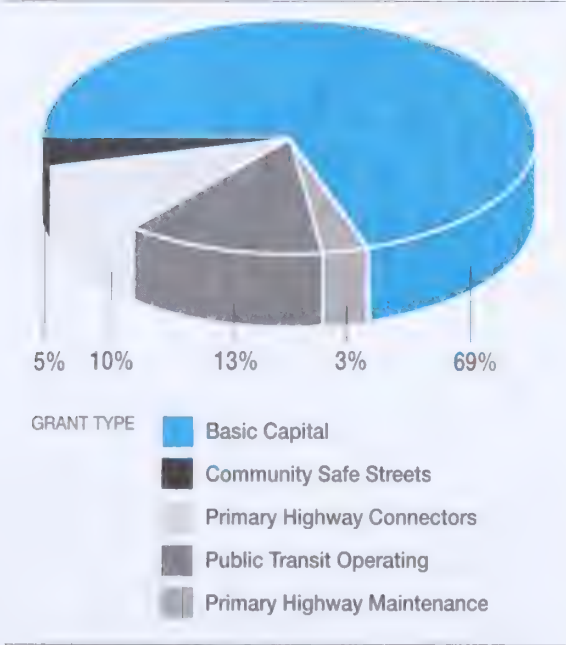
# MUNICIPAL INFRASTRUCTURE

## CITY TRANSPORTATION

Assistance to urban centres for capital and operating costs to develop and operate effective roadway and public transit systems was first established in 1931 and has been an ongoing provincial commitment ever since. The 1989/90 fiscal year marked the start of a new \$500 million, three year program, now known as the Alberta Cities Transportation Partnership. The program has five components including a new element, the Community Safe Streets Program, to provide a special incentive to reduce or resolve safety concerns.

During the reporting period, \$146 million was allocated to sixteen cities and the County of Strathcona (Sherwood Park) under the Partnership in the form of three capital grants and two operating grants. These grant components are Basic Capital, Community Safe Streets, Primary Highway Connectors, Public Transit Operating and Primary Highway Maintenance. Percentage breakdowns of assistance provided are detailed in Figure 1.

FIGURE 1:  
**Alberta Cities Transportation Partnership**  
DISTRIBUTION OF 1989/90 GRANT FUNDS



## Major Projects During 1989/90 Fiscal Year

Various construction projects were undertaken to improve transit systems, roadway facilities, accessibility, safety and overall transportation system efficiency. Following is a list of projects which provided significant enhancements to urban transportation systems used by the public:

### CALGARY

- **Brentwood NW LRT extension and Charleswood Drive Interchange:**
  - Construct one kilometre LRT extension with major station and parking facility
  - Construction of major interchange at Charleswood Drive.
- **Crowchild Trail, Bow River Bridge to University Drive upgrading:**
  - Widen roadway from four lanes to six lanes and construct noise walls
  - Improvements to increase capacity and improve access to downtown.

### RED DEER

- **Major Continuous Corridor and Railway Relocation Project – Red Deer:**
  - Major construction occurred on the railway relocation phase of this project which involves relocating the mainline through the city to an alignment west of Highway 2 and relocating the downtown railway yard to the northwest part of the city.

### EDMONTON

- **Groat Bridge reconstruction – Edmonton:**
  - Prolonged service life of a four-lane structure and widen existing sidewalk.
- **South LRT Extension Phase II – Edmonton:**
  - Extended line to Grandin Station (Government Centre).
- **Ring Road (Anthony Henday Drive) – Edmonton:**
  - Commenced construction of a four-lane arterial road from Whitemud Drive to Stony Plain Road.

### LLOYDMINSTER

- **62 Avenue construction – Lloydminster:**
  - Construction of alternate truck route from Highway 17 (north) through Highway 16 to Highway 17 (south).

### GRANDE PRAIRIE

- **98 Street upgrading – Grande Prairie:**
  - Widen road to four-lanes to improve safety
  - Install traffic signals at major intersections.

## RURAL TRANSPORTATION

### Streets Improvement Program

Effective April 1, 1989, a new Streets Improvement Program was implemented to provide cost-shared financial assistance to Alberta towns, villages and summer villages. Capital projects such as grading, gravelling, base course paving, sidewalks, curb and gutter, roadway drainage, bridges and related works are eligible for cost-sharing.

This new program provides enhanced per capita assistance and introduced a new program component entitled the Community Safe Streets Program. This initiative provides a \$2000 base grant and \$10 per capita, in addition to the regular grants, for safety-enhancing projects such as traffic control devices, improved street illumination, and pedestrian safety installations.

During 1989/90, \$10 119 282 was spent under the Streets Improvement Program to assist in the construction of 87 eligible projects. Under the Community Safe Streets Program, \$397 682 was provided towards the cost of 19 projects.

### Road Grants to Counties, Municipal Districts and Special Areas

For many years, Alberta Transportation and Utilities has provided formula based grants to rural municipalities to assist them in developing a network of roads to a uniform standard throughout the province.

During 1989/90 grants were provided for projects such as grading, gravelling, paving, base course, dust abatement and engineering related costs. Total funding provided is detailed as follows:

Regular Road Grants	\$24 019 127
Dust Abatement	\$ 2 590 465
Hamlet Streets Assistance	\$ 456 527
Engineering Assistance	\$ 588 828
Discretionary Grants	\$ 1 238 290
Special Area Grants	\$ 1 526 460



## MUNICIPAL WATER AND SEWAGE ASSISTANCE

### **Alberta Municipal Water Supply and Sewage Treatment Grant Program**

The Alberta Municipal Water Supply and Sewage Treatment Grant Program provides cost-shared financial assistance to cities (under 100 000 population), towns, villages, summer villages and hamlets for the construction of water supply and sewage treatment facilities. The primary objective of the program is to ensure that all Alberta residents have access to an adequate and safe supply of water and there is an acceptable level of sewage treatment within communities.

The 1989/90 fiscal year saw 120 projects approved for a total construction value of \$35 million. The grants provided to assist with the construction of these projects totalled \$23 368 651. The largest percentage of grants is being provided to towns. This is indicative of the growth experienced by these communities in recent years and the focus towards rural Alberta. Projects such as the \$3 million water supply line for the Summer Village of Chestermere Lake, the west bank trunk sewer for the Town of Peace River estimated to cost approximately \$2 million and the \$3 million sewage treatment facility upgrading for the Town of Westlock are just a few examples of projects funded during 1989/90 under this program.

### **Regional Utilities Program**

The Regional Utilities Program provides cost-shared funding to two or more municipalities to assist in the construction of multi-municipal water and wastewater facilities. Fiscal year 1989/90 was a successful year in that several significant projects were initiated or completed. Municipal Services acted as project managers on behalf of the Henry Kroeger Water Services Commission. The commission and the department together completed the construction of a 100 kilometres of regional water line from Hanna to Oyen which now provides a secure and safe water supply to many communities along this corridor.

The department also completed the Morinville Sewage Transmission System. The project was constructed and managed by Municipal Services and cost some \$5.5 million. This project represents the final leg of the Capital Region Sewage System which serves the communities in the Edmonton area.

During 1989/90, grants totalling approximately \$5 million were provided to Alberta municipalities and regional commissions for projects undertaken under the program.

### **Northern Supplementary Fund**

The Northern Supplementary Fund provides grants to northern communities for initiating or improving water and sewage facilities where, even with local revenues and other sources of income, costs of projects are far in excess of the provincial norm.

During 1989/90, \$2 000 000 was provided to northern communities for the construction of five projects.

### **Other Municipal Assistance**

#### ***Utility Officers Program***

Financial assistance is available to rural municipal authorities to make available a utilities officer within their jurisdiction. These individuals assist in the organization, development and regulation of utilities within counties, municipal districts or improvement districts. In 1989/90, \$1 460 478 was provided to 60 rural municipalities under this program.

# MOTOR TRANSPORT SERVICES



CVSA Inspection

## Collision Reduction

Efforts to ensure a safe motoring environment and reduce the number of collisions and their effects on Alberta highways resulted in a number of safety initiatives including an increase in the number of Commercial Vehicle Safety Alliance (CVSA) inspections for large commercial vehicles, implementation of all 16 National Safety Code (NSC) standards for commercial carriers, and the implementation of spring and fall public information campaigns promoting safety. In addition, the seat belt law was reinstated following a successful challenge to a lower court ruling that effectively tendered the initial seat belt law as invalid, and graduated speeding fines were introduced as a means of reducing the number of court challenges and increasing the deterrent for excessive speed.

The total number of CVSA inspections completed on commercial vehicles was in excess of 9500, a total well in advance of Alberta's NSC commitment for the period.

During the year 3940 NSC applications were processed. Enforcement of the NSC began January 1, 1990 commencing with the NSC hours-of-service standards. During the period January 1 to March 31, 1990, 2300 hours-of-service violations were detected and dealt with.

To further improve the mechanical fitness of commercial vehicles, NSC carriers were also offered an opportunity to become involved in a department sponsored Preventative Maintenance Program for their vehicles.

To ensure safe operation of large commercial vehicles, an air-brake endorsement program was implemented to ensure that all persons operating extended-length vehicles were trained and were fully capable of operating air-brake vehicles in a correct and safe manner. To further assist in operator improvement for large vehicles, a driver profile system was implemented whereby a record is maintained of all driver demerits incurred by large vehicle operators, and carriers are required to provide a driver improvement program specifically for those drivers in their operation that are identified as having an excessive number of demerits.



During the period a number of information initiatives were undertaken to develop greater awareness of highway safety requirements. Among those were the creation of an hours-of-service brochure, an escort driver's handbook, information kits for log haulers, collision statistics and participation at a number of trade shows and fairs throughout the province.

### Administrative Services

During the year the department processed 3811 operating authority applications, and issued 129 891 permits regulating the movement of oversize loads on Alberta highways. A grand total of 136 448 permits and certificates were issued during the year generating \$5 955 954 in departmental revenue.

Efforts to serve the transportation industry more efficiently resulted in the implementation of expanded hours of operation of the Central Permit Office and the introduction of toll free road ban information lines on a 24-hour basis. A Directory of Services was published to provide a listing of contacts for road-user services.

During the period there was a significant reduction in the extent of economic regulation in the trucking industry with a relaxing of what carriers can haul, and overall simplification of the operating authority application process.

### Protection of the Highway Infrastructure

Efforts to protect the province's investment in its highway infrastructure are made through several programs designed to strategically manage the trucking industry.

The administration of the department Road Ban Program also served to provide municipal districts and counties with a reference to administer their own road ban program in their own jurisdictions. To facilitate the communication of road bans, full operation of the Automated Road Ban Information System (ARBIS) was instituted providing 24-hour access to Alberta road ban information toll free. Publication of the Alberta Highway Map and Weight Guide provided additional information to the industry about safe truck routes.

New developments in the area of improved regulatory administration and service included the adoption and enforcement of the Road and Transportation Association of Canada (RTAC) weight and dimension standards in Alberta; expansion of the high load corridor to the Husky Upgrader in

Lloydminster; and the opening of a new Motor Transport Services district office in Slave Lake with construction of a Vehicle Inspection Station and truck inspection building.

Negotiations with British Columbia and the State of Montana to bring about the joint operation of Vehicle Inspection Stations located near the border were initiated during the year. This joint operation is well on its way to being implemented in 1990/91.

Consistent with its philosophy of management through education and industry self-compliance and enforced compliance only when necessary, education and training programs were delivered to both local governments and members of the commercial transport industry.

Provision of a City Truck Enforcement Program to all Alberta cities (with the exception of Spruce Grove) led to:

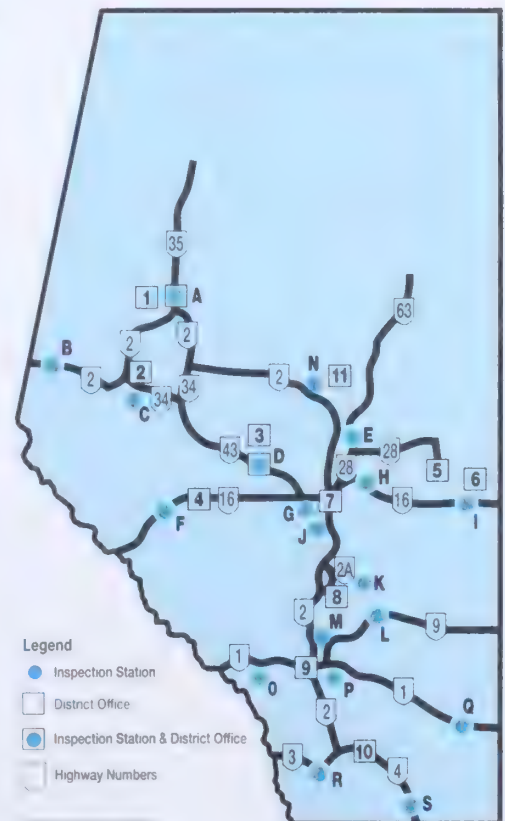
- the City of Edmonton's formation of a truck inspection squad
- Grande Prairie hiring a truck bylaw inspector
- numerous requests from municipalities to continue the program.

### Vehicle Inspection Stations

- A Grimshaw
- B Demmitt
- C Grande Prairie
- D Whitecourt
- E Radway
- F Yellowhead (Hinton)
- G Acheson
- H Ardrossan
- I Vermilion
- J Leduc
- K Red Deer
- L Morrin
- M Balzac
- N Slave Lake
- O Jumping Pound
- P Strathmore
- Q Dunmore
- R Burnis
- S Coutts

### District Offices

- 1 Grimshaw
- 2 Grande Prairie
- 3 Whitecourt
- 4 Edson
- 5 St. Paul
- 6 Vermilion
- 7 Edmonton
- 8 Red Deer
- 9 Calgary
- 10 Lethbridge
- 11 Slave Lake



Throughout the year Compliance Information provided representatives from the trucking industry and equipment manufacturers with information concerning standards and regulations for equipment for use in Alberta.

During the period various automated weighing and identification devices were tested to verify their accuracy and potential for use in Alberta. In addition, the first of a series of roadside weighing sites, comprised of a weigh scale and plug-in readout device, was installed near Rocky Mountain House for use as an inexpensive site by mobile patrols. Staff participated in a number of symposiums and conferences related to the maximization of vehicle weights while minimizing damage to the highway infrastructure.

### **Safety Education**

During the year several programs were developed and introduced to educate and remind Albertans to use our highway and road systems safely. Safety Education Representatives brought the messages to Alberta school children in a variety of forms with the most popular being the Mobile Safety City Program which teaches children bicycle and pedestrian safety. With popularity and demand for the program increasing every year, a second Mobile Safety City was constructed and implemented.

Educational programs to develop proper attitudes toward driving in both children and adults were introduced and production was completed on the final two modules of a nine-module video program designed to promote Motor Transport Services' highway safety and protection programs.

Efforts to promote the safe use and protection of Alberta's highways were enhanced through participation in 14 trade shows and career fairs throughout the province.

## **ALBERTA MOTOR TRANSPORT BOARD**

The Alberta Motor Transport Board has successfully accelerated its role in achieving regulatory reform under the provincial and federal legislation for the extra-provincial trucking industry of Alberta.

Some Canadian provinces and territories will take the full five years provided to implement the full regulatory reform package. Alberta has completed the reform implementation for the trucking industry within the first two and one-half years after implementation.

Alberta truckers are enjoying the benefits of the relaxed entry controls by having made considerable gains in transporting goods in the important north/south market between Alberta and the United States.

The Board continued to:

- operate with six part time Board Members and has succeeded in reducing its budget requirements by the reduced number of Public Hearings required
- advance the concept of "one-stop-shopping" with the view to reducing the paper burden of the carriers and their drivers. The Board has extended the life of its operating authority certificates to five years, which reduces both the carrier's expenses and the more frequent requirement to renew his certificate.

The number of charter bus operators in Alberta is experiencing continual growth under the Government's "ease-of-entry" policy, and while scheduled service patronage had been dropping off, the major carriers report increased ridership after the removal of VIA rail service.

The Board continues to work with other jurisdictions to bring about an even greater harmonization of regulation and reform legislation across Canada and with the United States to enhance the freer flow of goods by truck to and from Alberta.

**Mobile  
Safety City  
being taught**





# RURAL UTILITIES

## RURAL GAS

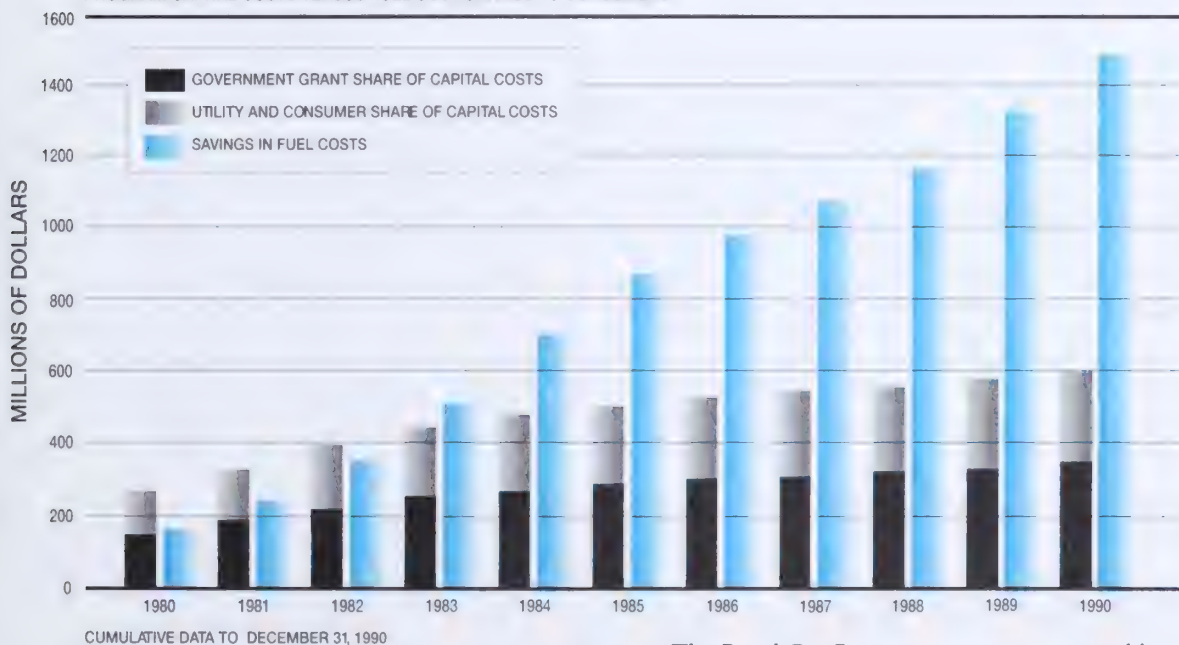
The Rural Gas Program was launched in 1973 to provide natural gas service to rural Albertans.

Since inception, and through the ongoing delivery of technical, regulatory, financial, and business services by Gas Utilities to rural gas distributors, over 94 500 kilometres of pipeline have been constructed resulting in 129 722 natural gas service installations. This included 3107 services and 2348 kilometres of pipeline installed in 1989/90.

As evidenced by the chart, rural Albertans have achieved significant savings in fuel costs as a result of the Rural Gas Program. These savings, \$1.53 billion, are based on natural gas costs versus equivalent propane costs, and are now more than twice the capital costs of \$607 million for the construction of the rural gas distribution system. To date, the government's contribution towards capital costs is \$363 million or about 60 per cent of costs. During the 1989/90 fiscal year \$9 759 685 was expended.

### Alberta Rural Gas Program

PROGRAM CAPITAL COSTS VERSUS FUEL COST SAVINGS TO CONSUMERS



The Rural Gas Program is unique on a world-wide scale. This ambitious initiative could only be accomplished as a result of the massive reserves of natural gas throughout the province, the tireless efforts of hundreds of dedicated volunteers, and the government's commitment to rural gasification. This year in an effort to capture this story, the department and the Federation of Alberta Gas Co-ops Ltd. jointly sponsored the writing and publishing of a new book entitled "Harvesting the Flame". This book details the development of rural gas systems from the 1960s through to 1989.

Gas Alberta, a section within Gas Utilities, acts as a "gas broker" under the Rural Gas Act and is responsible for the economical and efficient supply of natural gas to rural gas distributors throughout Alberta. Through this brokerage service, rural gas co-operatives and other rural distributors benefit from uniformly-priced and secure gas supplies. As a result of the deregulation of natural gas prices in 1983, Gas Alberta has been able to negotiate very favourable supply contracts with gas producers. In 1989 Gas Alberta was again able to reduce the gas rate to distributors by \$.05 per gigajoule.

## RURAL ELECTRIFICATION

Since 1953 the Rural Electrification Revolving Fund has been a source of financing for new electrical services for Alberta farmers. In 1987 the scope of its lending activities was extended to assist rural electrification associations with rebuilding their distribution systems. A total of approximately \$178 million in loans has been issued from the inception of the program. There continues to be a strong demand for the program as 1789 new loans totalling approximately \$8 million were issued in 1989/90. Highlights of the rural electrification program during 1989/90 are as follows:

- loans for new electrical services totalled \$7 003 084. Of this amount, \$1 723 842 was non-interest bearing (Part 2) loans which were issued to help reduce the cost of the more expensive electrical services to farmers
- 95 non-interest bearing loans totalling \$823 995 were issued to rural electrification associations to assist with their rebuild and distribution system improvement costs
- payments on outstanding loans during the year totalled \$4 471 473
- at year end the outstanding balance on the Rural Electrification Revolving Fund was \$67 228 130.

### Grant Activities:

#### *Isolated Communities Program*

A total of \$214 404 was provided to seven Metis settlements and \$49 616 was issued for electrical service in other areas of northern Alberta.

#### *Other Grants*

Grants totalling \$15 000 were issued to assist individuals to purchase a generating plant in remote areas where it is not economical to extend an electrical distribution line.

## GRANTS TO INDIVIDUALS

### *Heating Fuel Rebate Programs:*

- *The Primary Agricultural Producers Natural Gas Rebate Program* provided some 3000 farmers with an average rebate of \$645 each in 1989/90 to assist them with the cost of natural gas used in farm production facilities. Rebate payments totalled \$1.9 million compared to \$2.1 million in the previous year.
- *The Remote Area Heating Allowance Program* reduced heating costs by an average of \$275 for just over 3000 Albertans during the year who used propane or heating oil because natural gas service was not economically available. Total cost of rebates this year was \$833 000 compared to approximately \$1 million for the 1988/89 year.
- *The Propane/Fuel Oil Tank Grant Program* assisted 490 residents with the purchase or rental of heating fuel tanks. Average grant was \$137 during the 1989/90 fiscal year. Grants totalled \$67 352.
- *The Senior Citizens Home Heating Grant Program* provides an annual grant of \$100 to all senior citizen home owners to assist them with heating costs regardless of the type of fuel used. Nearly 101 000 seniors received the payment in respect of the 1989 calendar year. More than \$72 million has been paid under the program since its beginning in 1982.

### *Alberta Farm Water Grant Program*

The Alberta Farm Water Grant Program provides cost-shared financial assistance to Alberta farmers and ranchers constructing water transmission systems for domestic or stock-watering purposes.

From the onset of the Alberta Farm Water Program in 1985, technical advisory services were made available by the government to help develop farm water transmission systems that would best meet local needs. General technical advice is available to both individual and groups of farmers constructing permanent systems. Staff provided surveying and assistance in obtaining the required licensing.

During the 1989/90 fiscal year, the program provided approximately \$605 million to Alberta farmers to build water transmission facilities due to drought related conditions. This funding was distributed among 882 individuals, farmers and 366 farms which were in group projects or water co-operatives.



# ADMINISTRATIVE SERVICES

During the reporting period the main focus has been to improve existing levels of service and communications between the operating areas of the department and Administration. Action plans were focused with this objective in mind.

## FINANCIAL SERVICES

### Major Activities and Accomplishments:

- A new financial system called Departmental Financial System (DFS) was implemented. This government-wide system is used to pay all suppliers of goods and services. It also provides a variety of financial reports which are used internally within the department to monitor and control expenditures. Alberta Transportation and Utilities was the final department converting to DFS.

- The department based Financial Reporting and Control System (FRACS) was converted to work with the new DFS to allow job costing information to those areas who use job numbers to assist in controlling their work. Previous year FRACS operations were stabilized and processing and reporting were current and on schedule.

- A matrix was developed outlining spending authorities of expenditure officers in the department. This matrix was then reviewed with the majority of managers who will be using it. It will be released for general use early in 1990/91 and it is anticipated it will assist in strengthening departmental financial accountability.

- A Financial Management Awareness seminar was developed and presented to more than 150 staff members from Executive Managers to the Administrative Support level. This initiative is directly supportive of greater delegation of financial authority to operational work groups.

- A staff Exchange Program was piloted and will be promoted in 1990/91. This program allows finance staff to spend time in branch, regional and district offices and vice versa in order to create a better understanding of each others' work environment, procedures and responsibilities.

- A Budget Development Process booklet was developed to enhance greater understanding of the annual financial planning process. A wider distribution is planned for 1990/91.

- A financial expenditure and forecasting package was developed for the Executive Committee and the data discussed on a monthly basis with each member.

## PERSONNEL SERVICES

A number of activities resulted in several accomplishments, highlighted as follows:

- Improved communications relative to employee relations issues was of primary significance and resulted in reduced response time to inquiries.
- The department participated via representation on the steering committee, in the development and implementation of the provincial Administrative Support Series Review. The implementation involved obtaining new position descriptions for departmental administrative support positions and manually comparing these to previous descriptions on file. This review resulted in the “roll over” of approximately 500 positions to the new series.
- Through the training of regional office staff much of the recruitment of regional staff now occurs at that level. This delegated authority allows for greater autonomy and decreased recruitment turnaround times. In the 1990/91 fiscal year, this authority will be extended to include all positions below the professional and management level.
- A wage procedures manual was developed as a guide and reference and is to be used with the payroll system across the department. This manual has the potential to further reduce the number and frequency of errors associated with pay administration.
- The Human Resource Advisory Committee (HRAC) was reactivated departmentally to respond proactively to Human Resource issues.
- Planning is underway to provide information to management and employees for the development of careers within the department.
- A Women’s Program Committee was formed with representatives from across the department and a selected member of the Executive Committee as sponsor. The focus/objective of the committee is the development of plans which respond to women’s issues within the department.
- An Employee Orientation Program was implemented in 1990 that provides new employees with an understanding of the many areas within the department and how they interrelate. This will be the first step in an indepth departmental orientation program.

- A training program was co-ordinated and implemented to provide junior engineers with indepth experience in a minimum of four departmental areas prior to competing for permanent placement. The program provides a broad level of exposure which ensures an understanding of the purpose and function of major areas in the department.

- Based on comparative work hour statistics, a combined field and head office effort resulted in the lowest accident frequency rates in eight years.

- A training package was developed on the Workplace Hazardous Materials Information System (WHMIS) and, in conjunction with regional departmental staff, approximately 2400 employees were trained. A study unit intended to meet future training needs was also developed.

## INFORMATION SYSTEMS

Electronic data processing (EDP) systems and hardware are the backbone of departmental planning, engineering, program management and administrative functions. A key objective of Alberta Transportation and Utilities is to enhance data-sharing and integration of computer systems department-wide, thereby reducing duplication and maximizing the benefits of EDP technology.

Long range and annual plans for investment in data processing technology are guided by a Departmental Information Systems Committee, with representation across the organization. During the year new systems and enhancements to existing systems were made to improve the management of construction projects, the vehicle fleet, financial operations, and the National Safety Code. Micro-computers continued to be installed to help enhance the productivity of engineering, technical and administrative staff. With the aim of increasing efficiency, an office automation strategy was completed.





Intergraph System

## GENERAL SERVICES

During the 1989/90 fiscal year, highlights were as follows:

- An equipment evaluation was conducted to determine the department needs for large volume and quality colour copying with a view to upgrading equipment in 1990/91.
- A Facilities Management Program Review Committee was established with an objective to improve annual decision making processes involved with the acquisition of departmental facility resources. Implementation plans were proposed for the 1990/91 fiscal year.
- A pilot project for a new ventilation system concept to extract exhaust fumes was designed and installed in the Swan Hills Maintenance Shop. Results could impact approximately 85 provincial facilities.
- Transportation Library services were expanded to include on line connection to University of Toronto Automated Library System (UTLAS) which enhances the interlibrary lending capabilities. Application was also made to join the American Association of State Highway Transportation Officials, Electronic Bulletin Board - Electronic Mail system. (AASHTO EBB/E-Mail)
- The Semi-Active Records Centre procedures manual was completed and issued. This manual is designed to assist department staff in complying with semi-active records procedures.

- The development of a Department Claimfile System (DCS) is in the completion stages. This new system will allow easier access to status of claims, fleet claim information, third party involvement, fleet workorder analysis, cross reference to Alberta Treasury claim files and write off reports of all units due to accidents.

In June 1989 the department approved a Fixed Assets policy that required the maintenance of a standardized system to govern the control of fixed assets through their life cycle. The Asset Inventory Management System (AIMS) is a microcomputer based system which will be used by 45 administrative centres located throughout the province. Implementation started in February 1990 and the first phase included the identification of office equipment and furniture.

## INTERNAL AUDIT SERVICES

Internal Audit Services was established in June 1989 in fulfilment of one of the department's strategic objectives. During the first few months of operation the mission statement for Internal Audit was developed and approved by the Deputy Minister. Subsequent to receiving this approval, the Audit Committee, composed of senior management in the department, was established. Now provided with the essential independence and objectivity, actual audit activities commenced in the department.

By year end three audits had been performed with the assistance of professional auditing firms. These audits included an operational audit in Municipal Services, Support Programs, a functional (revenue) audit in Motor Transport Services, and a comprehensive audit in District 1, Medicine Hat in Engineering and Operations. For the most part these audits were well received by the auditee management who generally agreed with the recommendations contained in the reports as well as agreeing to introduce corrective measures. However, in addition to the specific benefits identified in each of these three initial audit reports, these audits also provided the department with a means of assessing the effectiveness and efficiency of its operations.

# ORGANIZATIONAL ROLES IN ALBERTA TRANSPORTATION AND UTILITIES

Responsibilities are noted under each agency, division and branch.

## MOTOR TRANSPORT BOARD

- manages within the framework of the Alberta Motor Transport Act the regulatory system governing intra and extra-provincial transportation as delegated to the Board by the Federal Motor Vehicle Transport Act (1987).

## ALBERTA RESOURCES RAILWAY

- accountable for revenues generated from railway usage.
- annually assesses required railway maintenance.

## LEGAL SERVICES

- provides legal services to the department through seconded Attorney General's department employees.

## PUBLIC COMMUNICATIONS

- provides public relations counsel and communications services supporting departmental policies, programs and activities.

## PLANNING AND DEVELOPMENT

- provides advice and recommendations to the department and government on policies, programs and plans.
- provides leadership and co-ordination for the application of new technologies and information systems throughout departmental operations.

### **Policy Development**

- provides direction for strategic planning for the department.
- develops and evaluates transportation policies, programs and legislation affecting all modes.

### **Systems Planning**

- provides long-range planning for an integrated multi-modal Alberta transportation system.

### **Research and Development**

- plans and manages applied research and technology transfer programs to benefit the department's construction, maintenance and other operations.



### **Information Systems**

- plans and manages the application of electronic data processing (EDP) systems and hardware in departmental operations.

## **ADMINISTRATION**

- provides administrative support services necessary for the delivery of departmental programs.

### **Financial Services**

- provides financial planning co-ordination and a controllership function aimed to ensure efficient and effective financial policies, procedures and controls.

### **General Services**

- provides a variety of essential services, including accommodation and facilities planning, records management, library, insurance and office support.

### **Personnel Management**

- provides expert personnel management services aimed to enhance the effectiveness of the human resources of the department.

## **ENGINEERING AND OPERATIONS**

- primary focus is on the design and delivery of the department's capital construction (roadway, bridge and airport) and maintenance programs.

### **Regional Operations**

- responsible for the development, scheduling and fiscal control of major construction programs.
- provides management and field implementation for the delivery of construction and maintenance of the provincial transportation system.

### **Engineering Services**

- provides engineering services, contracting services, and design and materials standards for the department's roadway and airport construction and maintenance programs.

### **Property Services**

- provides policy development and standards for land acquisition and management and monitors the property administration process.

### **Operational Planning Services**

- responsible for translating the future requirements of the provincial roadway system into specific location and function plans, and to recommend operational improvements to the existing system.

### **Bridge Engineering**

- responsible for the engineering, design and delivery of the department's capital bridge programs and bridge maintenance standards.

### **Equipment Supply and Services**

- provides fleet, materials and shop services, supporting the department's operations.

## **MOTOR TRANSPORT SERVICES**

- provides an on/off highway user program which ensures a safe motoring environment while protecting the highway infrastructure within legislative requirements.

### **Engineering**

- responsible for developing weight and dimension regulations, policies and procedures which balance highway user needs with the physical capabilities of the road and a high standard of highway safety.

### **Support Services**

- provides administrative, communications and operational support services within the division.

### **Transport Field Operations**

- as the enforcement arm of the division, ensures public vehicle compliance with applicable Provincial/Federal Statutes and Regulations.

### **Transportation Safety**

- provides direction and leadership to ensure the safe transportation of people and goods on Alberta highways.
- responsible to take positive, pro-active steps to reduce motor vehicle collisions and their accompanying injuries and fatalities.

### **Planning and Statistics**

- provides the following functions: planning, research, business analysis and policy development as well as operation of the Alberta Collision Information System (ACIS) and other statistical operations.

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## SUPPORT PROGRAMS

- provides financial assistance programs and related technical, advisory and regulatory services to urban and rural municipalities and individuals.

### **Gas Utilities**

- manages, co-ordinates and administers all aspects of the department's involvement in the rural gas utility industry.

### **Municipal Services**

- delivers a variety of financial, technical and advisory services to towns, villages, summer villages, municipal districts, counties and special areas with respect to transportation and utilities infrastructure.
- administers utilities officers assistance to rural municipalities.

### **Urban Transportation**

- provides financial, technical and advisory services to the province's 17 urban centres respecting transportation projects.
- liaises with city council and administrations ensuring the program meets cities' road priorities and that projects utilizing program funds are consistent with the department's overall transportation system.

### **Utility Services**

- administers the department's grant, rebate and loan programs to individual Albertans in support of rural electrification, farm water systems and reducing heating fuel costs.



ALBERTA TRANSPORTATION AND UTILITIES  
**REVOLVING FUND OPERATIONS**  
 YEAR ENDED MARCH 31, 1990

**FINANCIAL  
 STATISTICS**

	1990	1989
	(\$'000 000)	(\$'000 000)
<b>Transportation Revolving Fund:</b>		
Total Assets	\$96.2	\$92.3
Current Liabilities	10.4	6.8
Advances from the Province of Alberta (maximum \$200 million)	81.8	81.1
Surplus	4.0	4.4
Revenue	72.3	66.5
Expenses	72.6	70.0
<b>Net Income (Loss) for the year</b>	<b>\$ (0.3)</b>	<b>\$ (3.5)</b>
<b>Rural Electrification Fund:</b>		
Total Assets	\$73.1	\$69.0
Advances from the Province of Alberta (maximum \$75 million)	67.9	65.0
Loan repayment	0.6	0.5
Loans advanced	\$ 7.8	\$ 6.3
<b>Gas Alberta:</b>		
Total Assets	\$15.6	\$20.4
Current Liabilities	5.1	8.0
Advances from the Province of Alberta (maximum \$12 million)	10.0	12.0
Surplus	0.5	0.4
Revenue	26.4	27.7
Expenses	26.3	27.6
<b>Net Income (Loss) for the year</b>	<b>\$ 0.1</b>	<b>\$ 0.1</b>

## ALBERTA TRANSPORTATION AND UTILITIES

**GENERAL REVENUE FUND**

YEAR ENDED MARCH 31, 1990

**BUDGET ESTIMATES, SPECIAL WARRANTS, TRANSFERS AND EXPENDITURES**

(CLASSIFIED BY CONTROL GROUP)

	Budget Estimates	Special Warrants	Transfers	Total Authorization	Actual Expenditures
Manpower	\$ 143 076 424	\$ 1 620 000	(\$ 217 606)	\$ 144 478 818	\$ 137 324 923
Supplies and Services	475 165 620	3 845 000	( 303 196)	478 707 424	491 288 976
Grants	259 313 758	2 700 000	—	262 013 758	262 399 848
Fixed Assets	14 146 407	—	(7 590)	14 138 817	8 143 762
Other	45 115	—	—	45 115	51 383
	\$ 891 747 324	\$ 8 165 000	(\$ 528 392)	\$ 899 383 932	\$ 899 208 892
Operating	\$ 189 125 020	\$ 5 000 000	(\$ 520 802)	\$ 193 604 218	\$ 197 254 352
Capital	702 622 304	3 165 000	(7 590)	705 779 714	701 954 540
	\$891 747 324	\$8 165 000	(\$528 392)	\$899 383 932	\$899 208 892

**REVENUE**

(CLASSIFIED BY SOURCE)

	1990 (\$'000)	1989 (\$'000)
Payments from Government of Canada	\$ 3 191	\$ 5 629
Fees, Permits & Licences	6 192	6 553
Refunds of expenditures	5 017	1 424
Cost Sharing agreements	7 881	13 756
Sales of assets and other revenue	2 870	1 035
<b>TOTAL REVENUE</b>	<b>\$25 151</b>	<b>\$28 397</b>



**C. Anderson**  
MANAGING DIRECTOR  
ALBERTA  
RESOURCES BOARD

**J. MacGregor**  
A.D.M.  
PLANNING AND  
DEVELOPMENT

**D. J. Porter**  
A.D.M.  
ADMINISTRATION

**C. Lendzion**  
EXECUTIVE  
DIRECTOR  
SYSTEMS PLANNING

**B. James**  
EXECUTIVE  
DIRECTOR  
FINANCE

**A. Werner**  
DIRECTOR  
TRANSPORTATION  
PLANNING

**D. Tworowski**  
DIRECTOR  
ACCOUNTING  
OPERATIONS

**S. Quiring**  
DIRECTOR  
SPECIAL PLANNING  
PROJECTS

**K. Chrisp**  
DIRECTOR  
SYSTEMS AND  
METHODS

**R. Bassett**  
EXECUTIVE  
DIRECTOR  
POLICY DEVELOPMENT

**L. Hempsey**  
DIRECTOR  
FINANCIAL PLANNING  
AND CONTROL

**D. Szarko**  
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POLICY & STRATEGIC  
PLANNING

**S. Hayter**  
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DIRECTOR  
PERSONNEL

**R. Thompson**  
DIRECTOR  
SERVICE  
DEVELOPMENT

**E. Tywoniuk**  
DIRECTOR  
GENERAL SERVICES

**V. Hamm**  
DIRECTOR  
TRANSPORT  
DEVELOPMENT

**DIRECTOR**  
SUPPLY  
MANAGEMENT

**D. McTavish**  
DIRECTOR  
INFORMATION  
SYSTEMS

**J. Konarzewski**  
DIRECTOR  
RESEARCH AND  
DEVELOPMENT



